

**Ballast Spreader**



**Production Tamper**



**Tie Inserter**



**Track  
Stabilizer**



**CTA Slow Zone Update  
December 12, 2006**



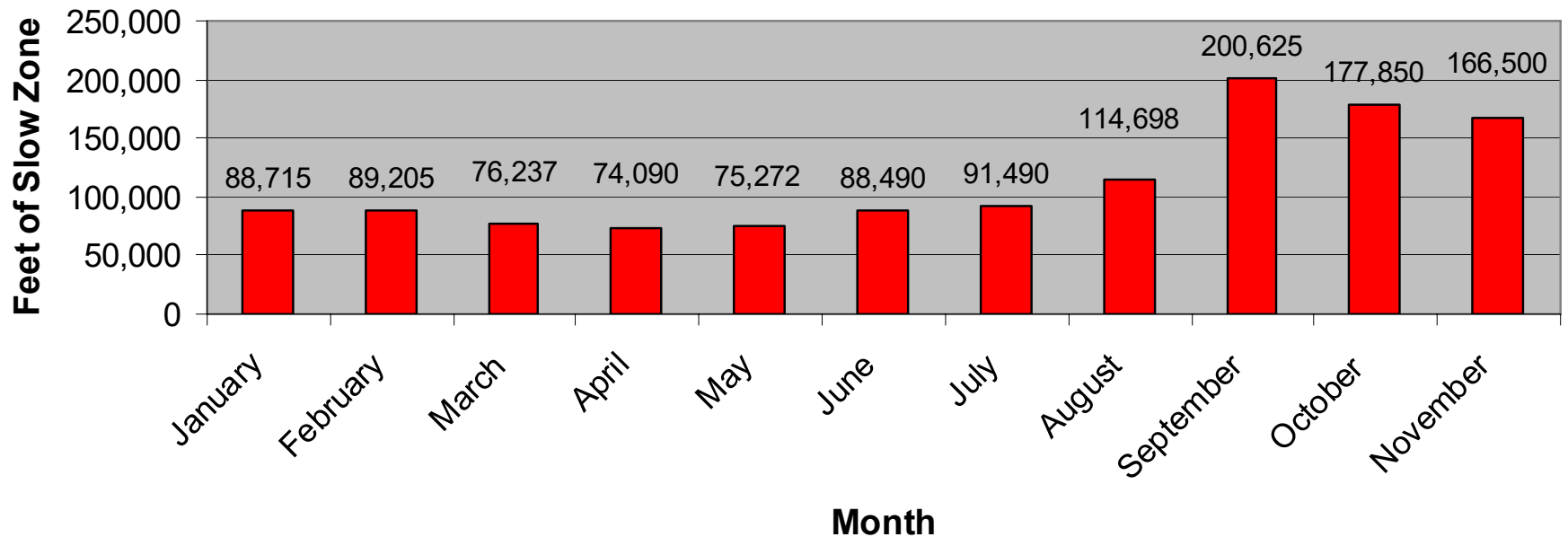
# **Rail Slow Zone Update Definition**

- **A “slow zone” is a specific segment of track where the speed at which the train operates is reduced due to defective track, structure, signal or traction power conditions. Also slow zones are implemented during construction.**
- **A “work zone” is where workers are on the tracks and are protected by flagmen from the trains. In work zones, the trains often have to stop and wait for the area to be secured and the crews to clear the trains. Work zones are not allowed during rush hours (5 am – 9am, 3 pm – 7pm) during the work week.**



# Rail Slow Zone Update As of November 2006

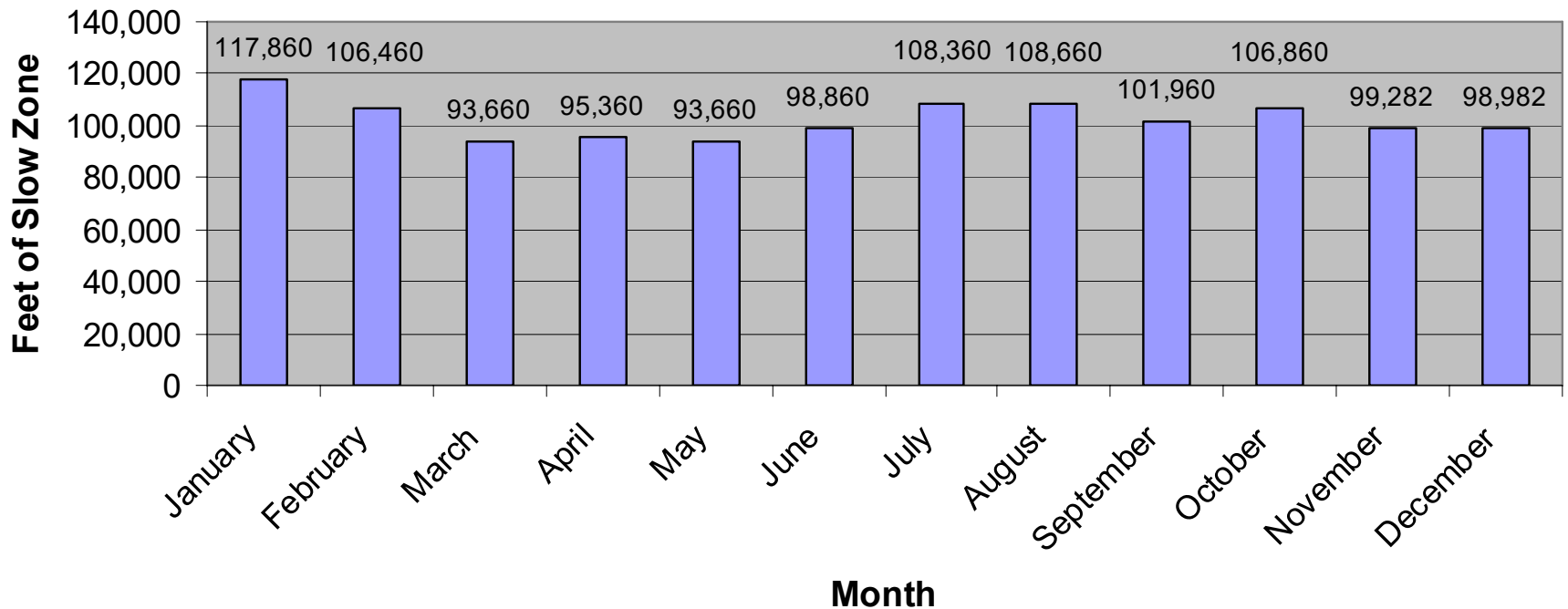
## 2006 Rail System Slow Zones by Month





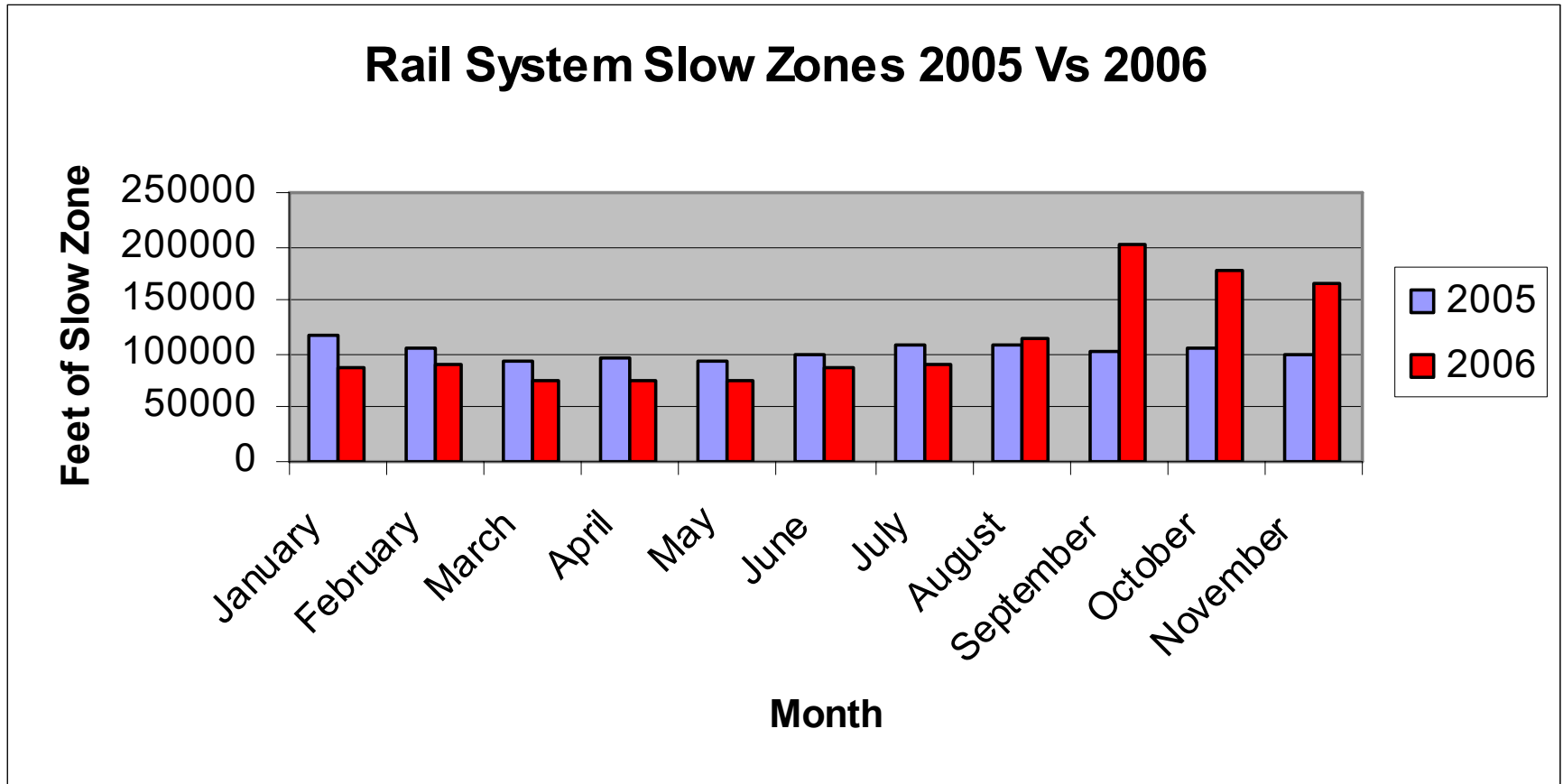
# Rail Slow Zone Update 2005 by Month

## 2005 Rail System Slow Zones by Month





# Rail Slow Zone Update 2005 by Month





# **Rail Slow Zone Update Causes**

- **Defective track, structure, signal or traction power conditions can be caused by wear and tear on an aging infrastructure**
- **As the Rail system ages, these components cannot be successfully maintained and require complete replacements**
- **Extended periods of high temperatures this summer increased stress on already worn components**
- **Recently rehabilitated infrastructure such as the Green Line Lake Branch, Orange Line or the Pink Line have no slow zones**



# Rail Slow Zone Update Examples



Structural slow zone on the 54<sup>th</sup>/Cermak Branch pre-rehabilitation





# Rail Slow Zone Update Examples



Same Span after construction





# Rail Slow Zone Update Example



Structural slow zone on the Purple Line pre viaduct replacement



# Rail Slow Zone Update Example



Church viaduct replacement



# Rail Slow Zone Update Example



Track slow zone due to bad wood ties





# Rail Slow Zone Update Example



Wooden ties in good condition

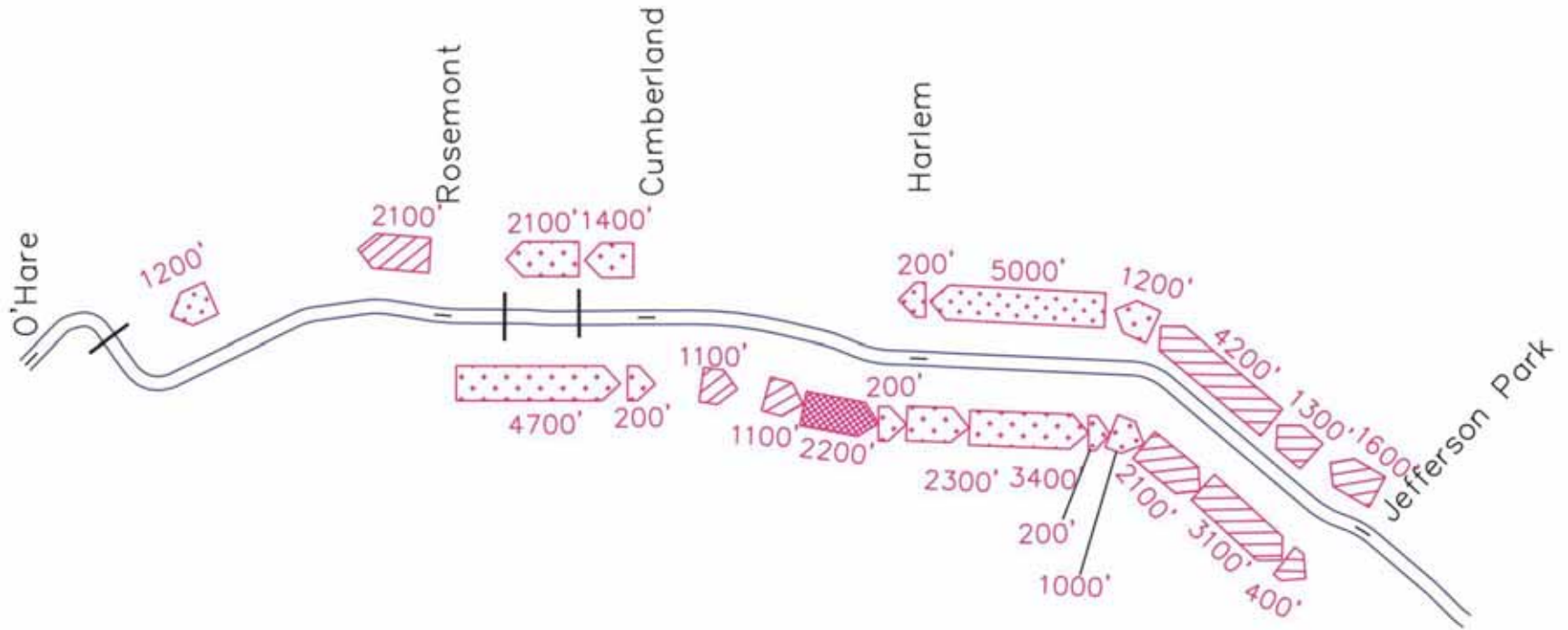


New plastic ties



# Rail Slow Zone Update

## Blue Line

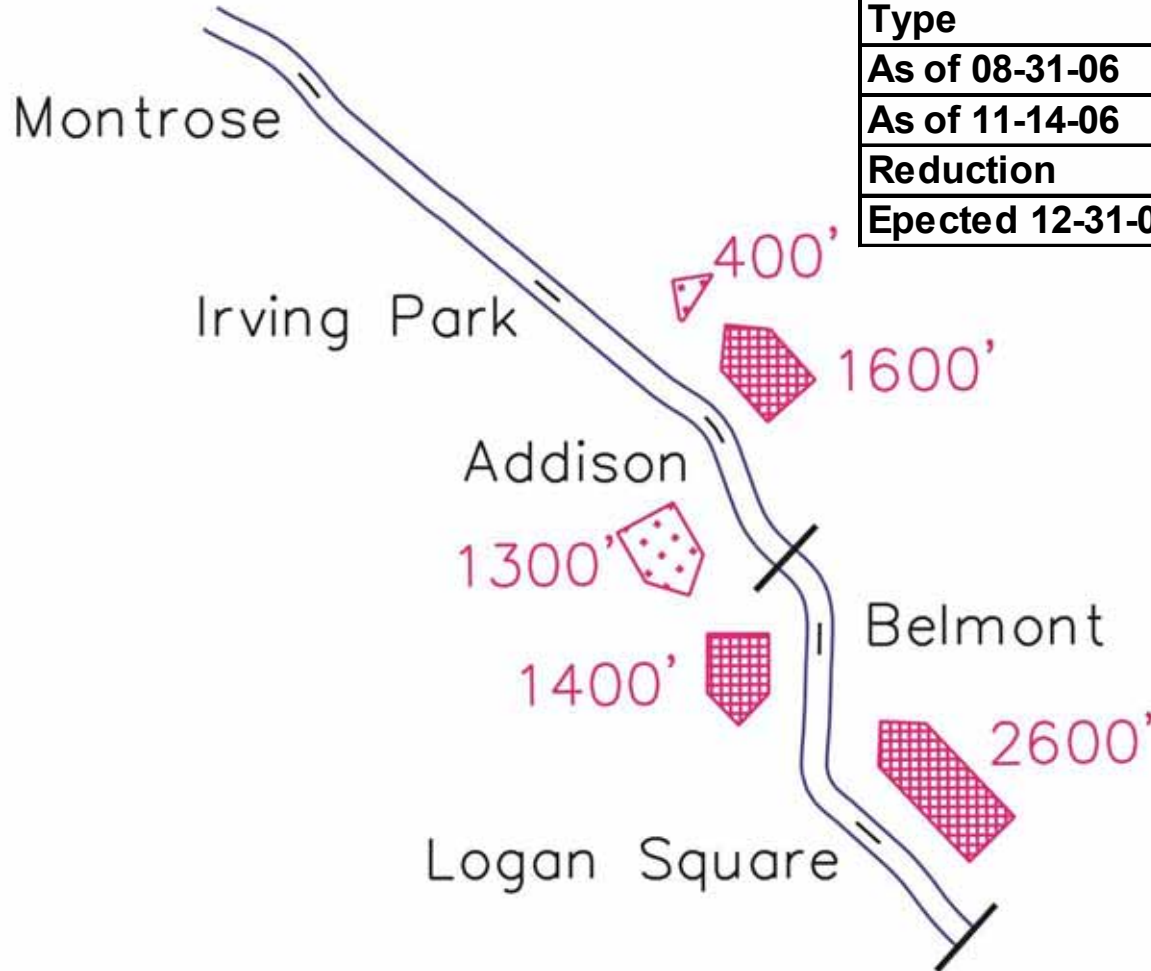


Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	20,250	19,000	9,400	48,650
As of 11-14-06	23,100	17,000	2,200	42,300
Reductions	0	0	0	0
Expected 12-31-06	23,100	1,700	2,200	42,300

Track (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update Blue Line



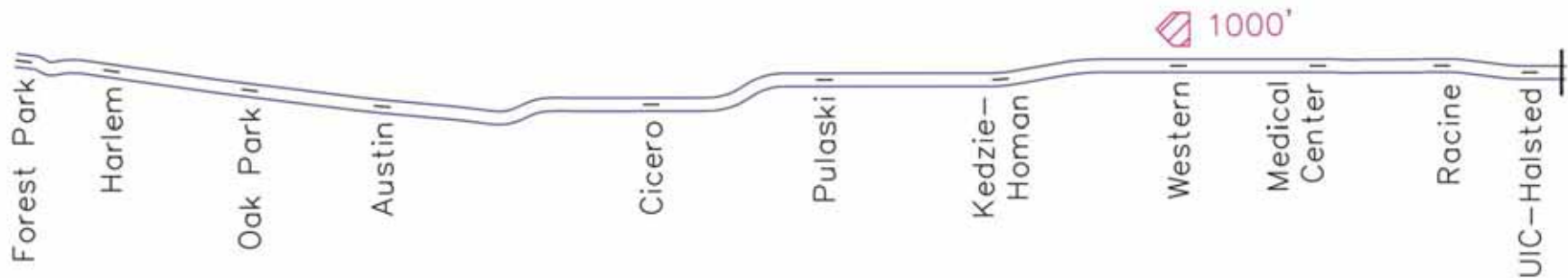
Jefferson Park to Damen				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	1,700	0	4,800	6,500
As of 11-14-06	1,700	0	5,600	7,300
Reduction	1,000	0	0	1,000
Expected 12-31-06	700	0	5,600	6,300

Track (CTA)	15 mph	
	25 mph	
	35 mph	





# Rail Slow Zone Update Blue Line

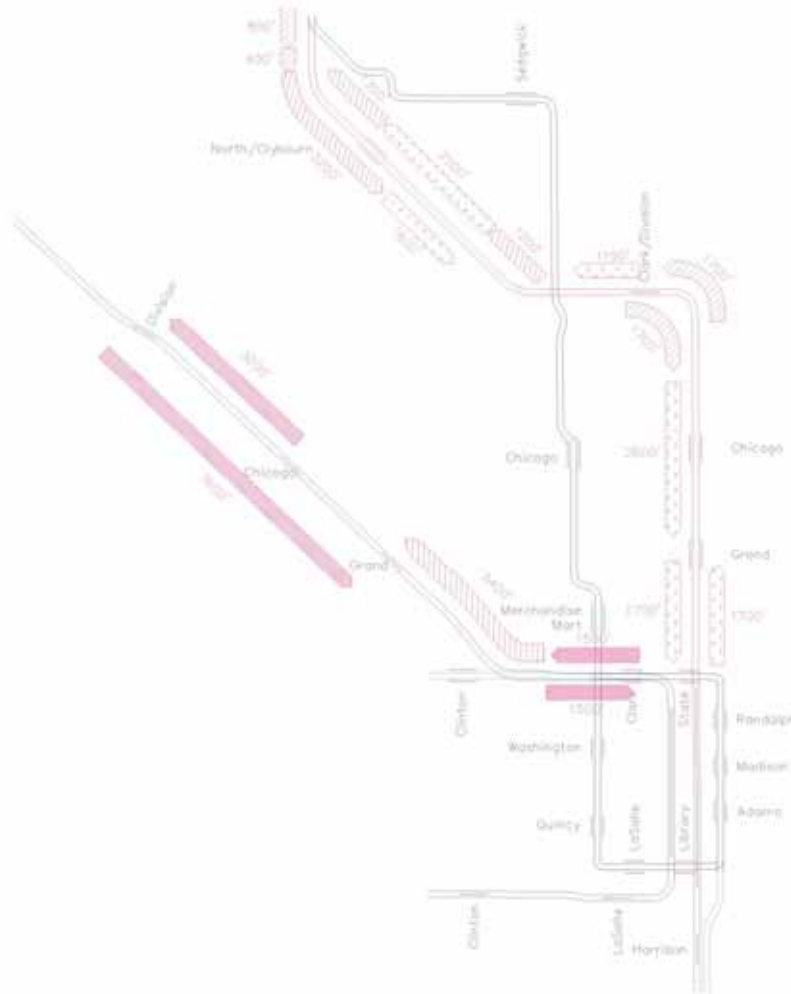


UIC Halsted to Forest Park				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	1,000	0	0	1,000
As of 11-14-06	1,000	0	0	1,000
Reduction	0	0	0	0
Expected 12-31-06	1,000	0	0	1,000

Track (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update Subways



Division to LaSalle (Blue Line)				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	0	3,400	13,600	17,000
As of 11-14-06	0	3,400	13,600	17,000
Reduction	0	2,000	0	2,000
Expected 12-31-06	0	1,400	13,600	15,000

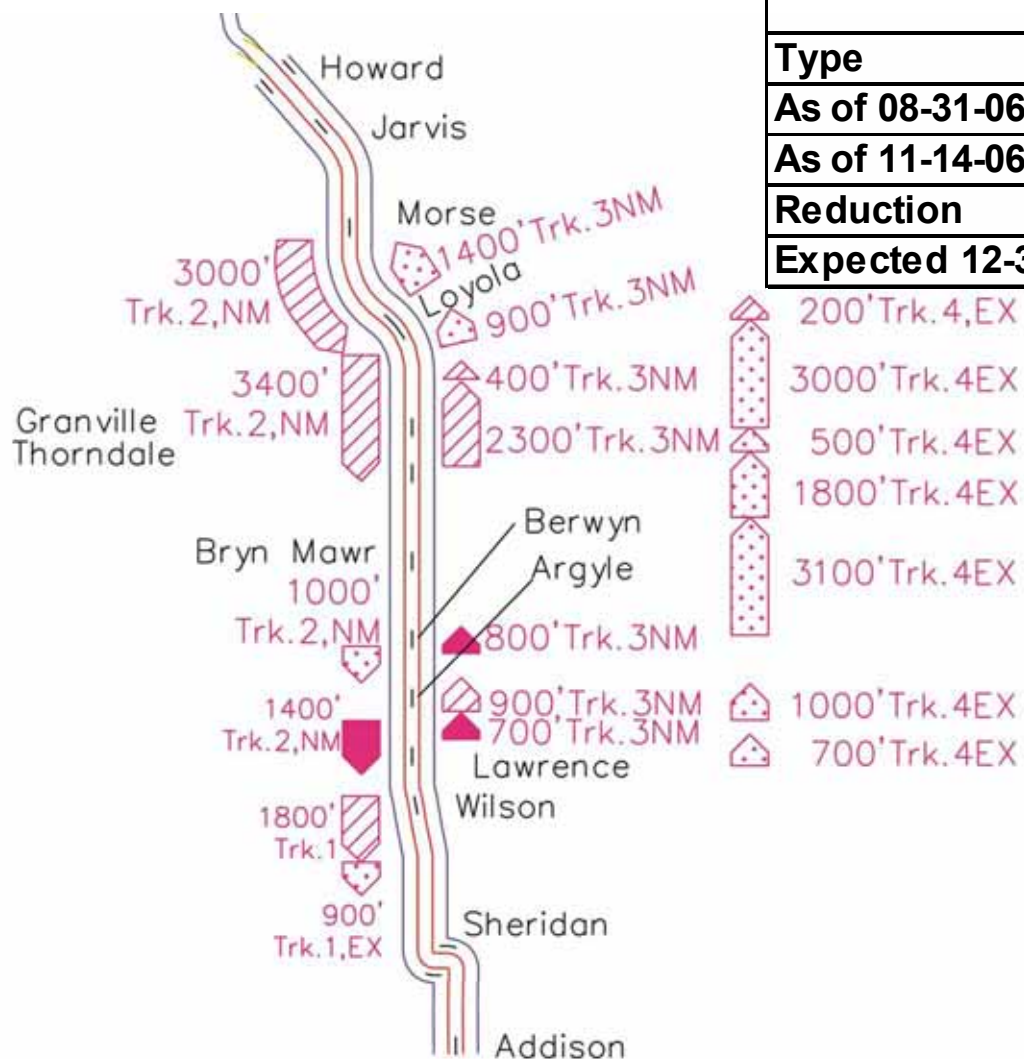
North/Clybourn to Roosevelt (Red Line)				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	12,200	11,600	0	23,800
As of 11-14-06	11,200	10,300	0	21,500
Reduction	0	0	0	0
Expected 12-31-06	11,200	10,300	0	21,500

Track (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update

## Red Line



Howard to Addison				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	14,700	5,300	1,400	21,400
As of 11-14-06	14,300	12,000	2,900	29,200
Reduction	0	0	0	0
Expected 12-31-06	14,300	1,200	2,900	29,200

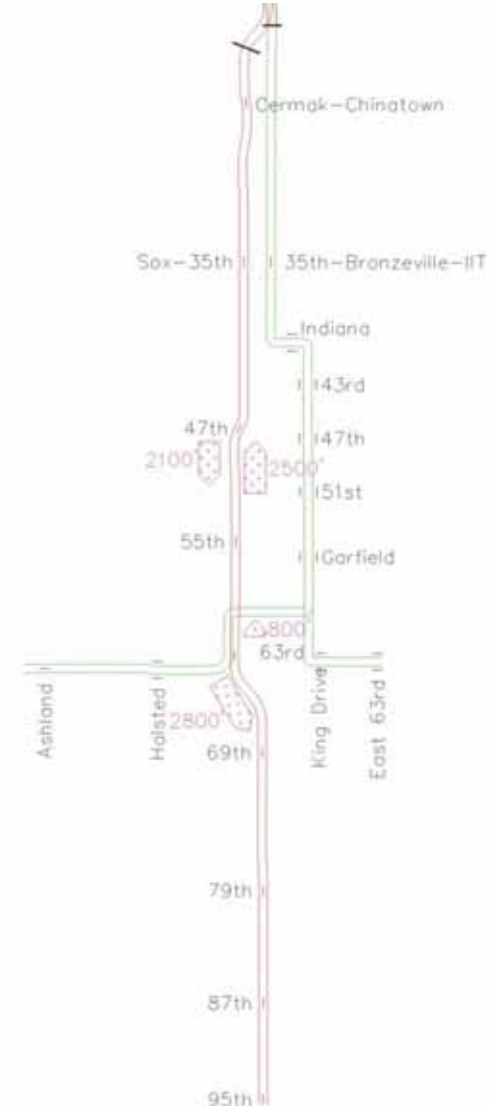
Track (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update Red Line

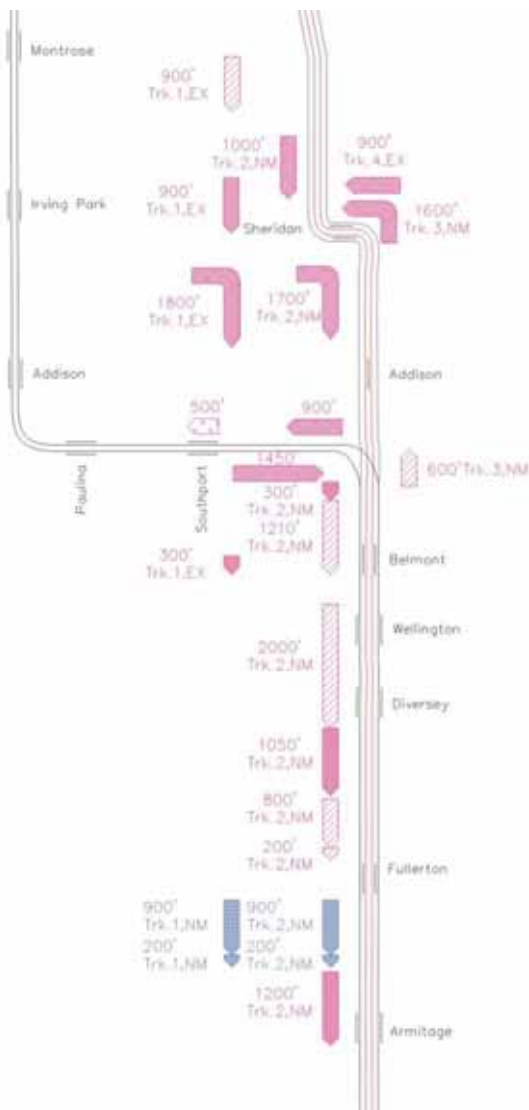
Roosevelt to 95th				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	21,875	0	1,000	22,875
As of 11-14-06	8,200	0	0	8,200
Reduction	5,300	0	0	5,300
Expected 12-31-06	2,900	0	0	2,900

Track (CTA)	15 mph	
	25 mph	
	35 mph	





# Rail Slow Zone Update Clark Junction Corridor



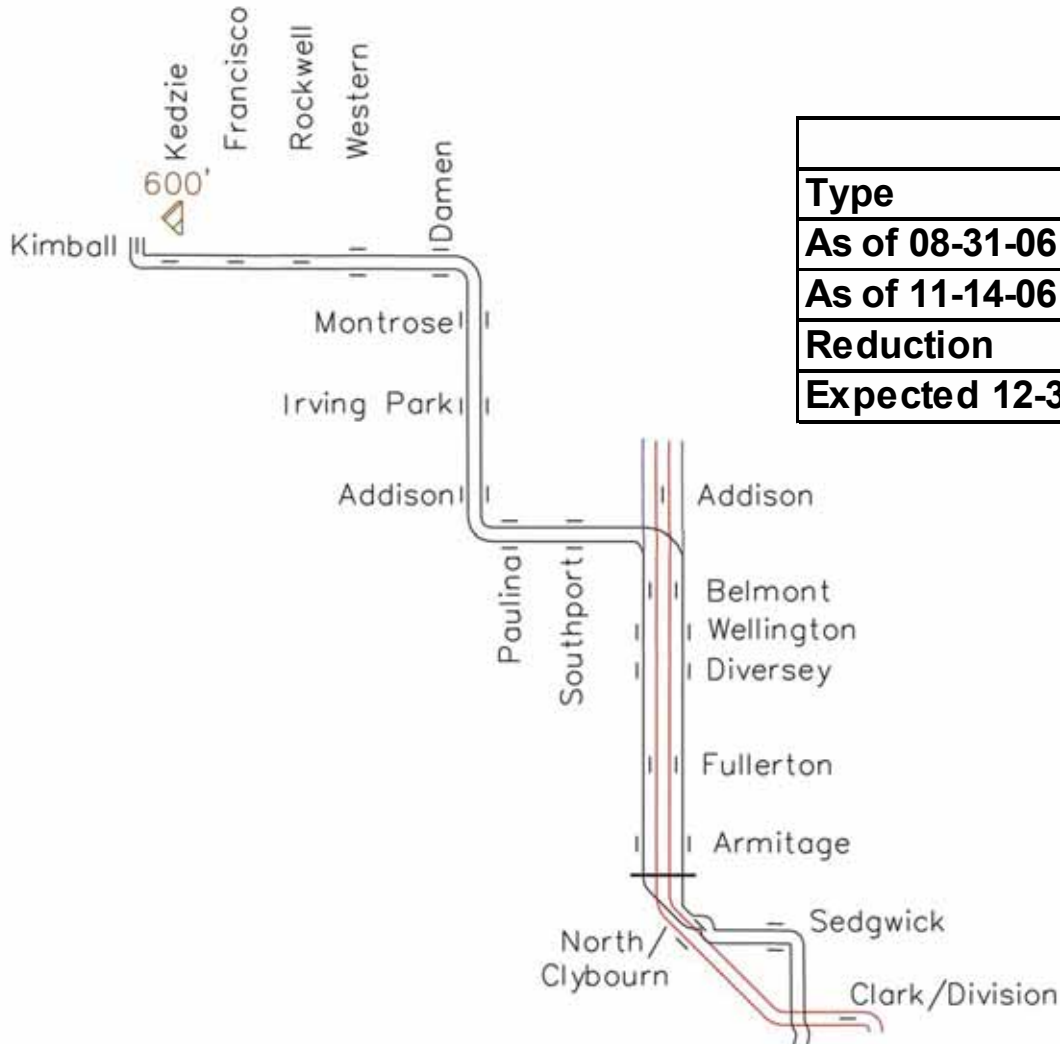
Clark Junction (Track)				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	4,100	1,700	19,080	24,880
As of 11-14-06	0	5,710	13,100	18,810
Reduction	0	0	0	0
Expected 12-31-06	0	5,710	13,100	18,810

Clark Junction (Structure)				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	200	0	1,700	1,900
As of 11-14-06	0	0	2,200	2,200
Reduction	0	0	0	0
Expected 12-31-06	0	0	2,200	2,200

Track (CTA)	15 mph	
	25 mph	
	35 mph	
Structure (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update Brown Line



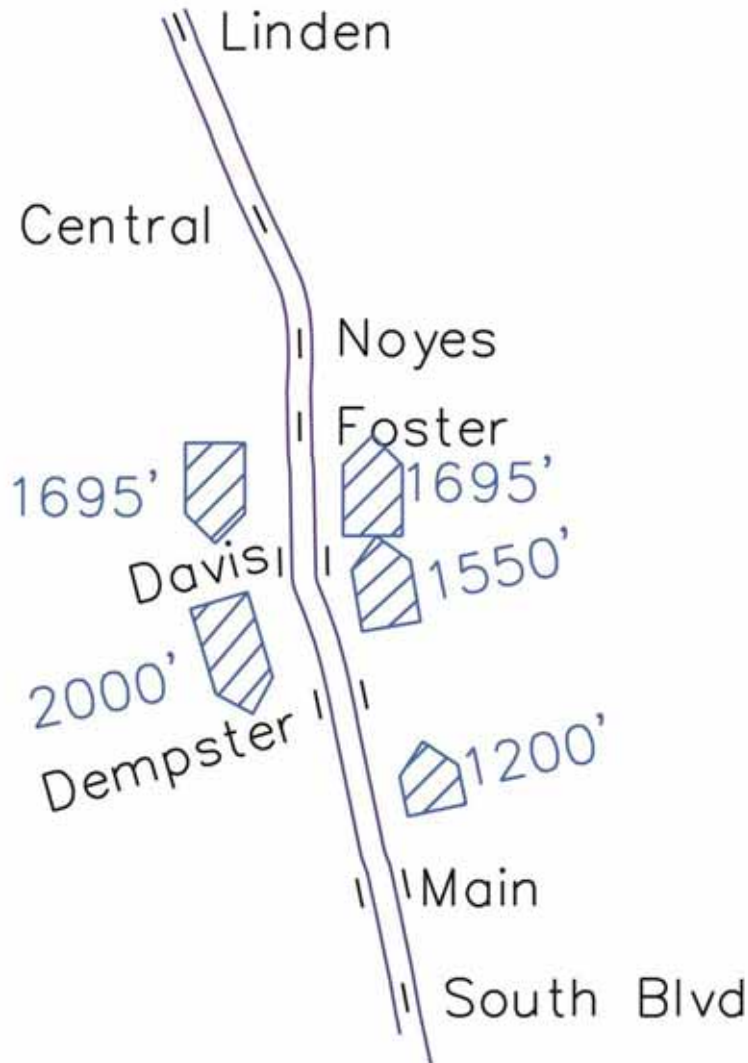
Kimball to Sedgwick				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	0	4,500	700	5,200
As of 11-14-06	0	600	0	600
Reduction	0	0	0	600
Expected 12-31-06	0	600	0	600

Signal (CTA)	15 mph	
	25 mph	
	35 mph	





# Rail Slow Zone Update Purple Line

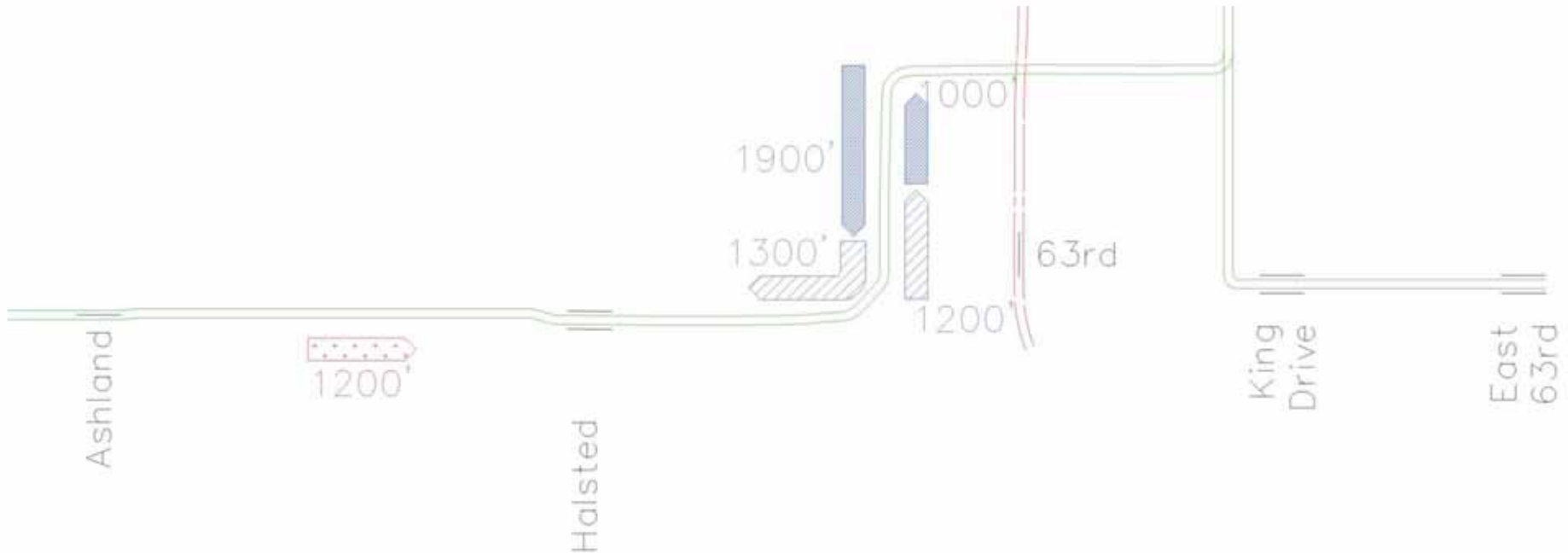


Linden to Howard				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	0	6,445	0	6,445
As of 11-14-06	0	8,140	0	8,140
Reduction	0	0	0	0
Expected 12-31-06	0	8,140	0	8,140

Structure (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update Green Line

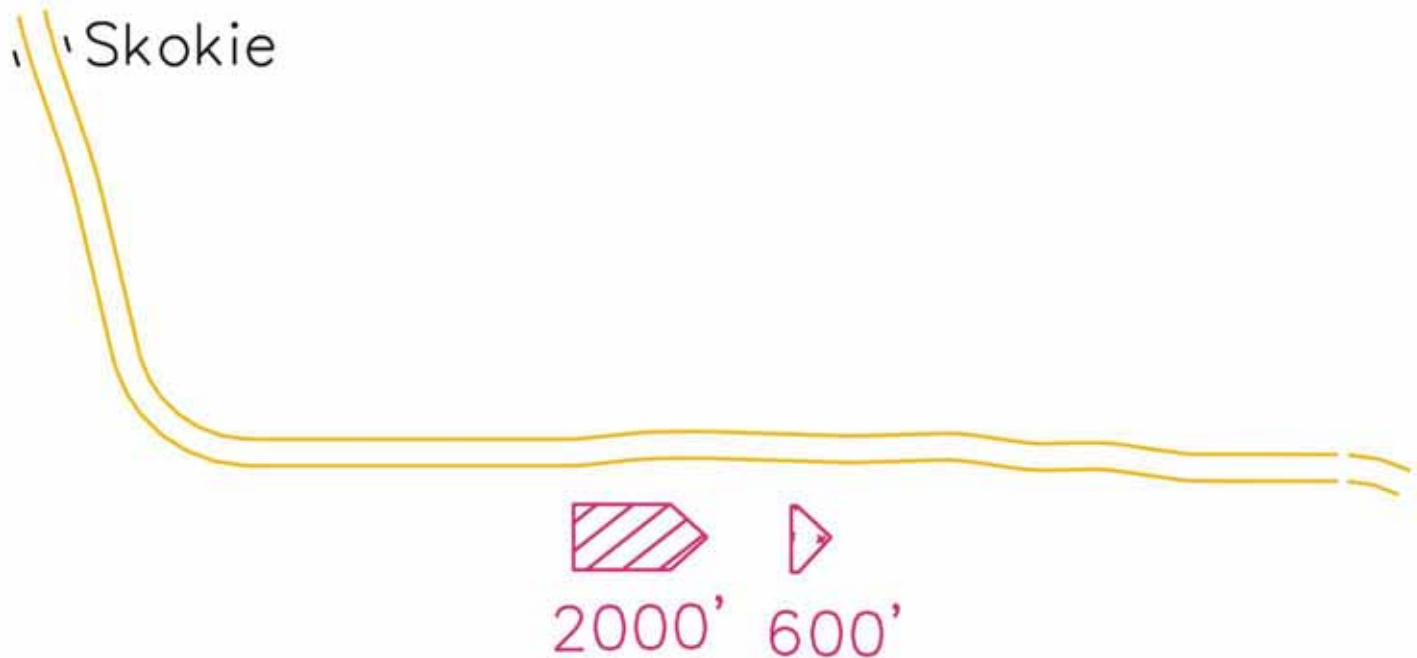


Garfield to Ashland				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	0	3,700	4,800	8,500
As of 11-14-06	1,200	2,500	2,900	6,600
Reduction	0	1,300	0	1,300
Expected 12-31-06	1,200	1,200	2,900	5,300

Track (CTA)	15 mph	
	25 mph	
	35 mph	
Structure (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update Yellow Line



Skokie to Howard				
Type	35 MPH	25 MPH	15 MPH	Total
As of 08-31-06	600	2,000	0	2,600
As of 11-14-06	600	2,000	0	2,600
Reduction	0	0	0	0
Expected 12-31-06	600	2,000	0	2,600

Track (CTA)	15 mph	
	25 mph	
	35 mph	



# Rail Slow Zone Update Estimated Reductions

	<b>As of 11-14-06</b>	<b>Reductions</b>	<b>As of 12-31-06</b>	<b>Percent Change</b>
<b>Red Line</b>	59,760	5,300	54,460	-8.87%
<b>Blue Line</b>	67,600	3,000	64,600	-4.44%
<b>Brown Line</b>	3,450	0	3,450	0.00%
<b>Green Line</b>	6,600	1,300	5,300	-19.70%
<b>Orange Line</b>	0	0	0	0.00%
<b>Pink Line</b>	0	0	0	0.00%
<b>Yellow Line</b>	2,600	0	2,600	0.00%
<b>Purple Line</b>	25,440	0	25,440	0.00%
<b>Total</b>	<b>165,450</b>	<b>9,600</b>	<b>155,850</b>	<b>-5.80%</b>

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# **CTA Slow Zone Update December 12, 2006**